



**University of
Zurich**^{UZH}

**Zurich Open Repository and
Archive**

University of Zurich
University Library
Strickhofstrasse 39
CH-8057 Zurich
www.zora.uzh.ch

Year: 2005

Exposure to and annoyance with second-hand smoke in Switzerland: results of the Tobacco Monitoring Survey

Keller, Roger ; Prinz-Kaltenborn, Ramona ; Krebs, Hans ; Hornung, Rainer

Abstract: Summary.: Objectives: To present selected results on exposure to secondhand smoke and experienced annoyance with second-hand smoke in the Swiss population, particularly in restaurants and in the workplace. Methods: The data were collected as part of the Swiss Survey of Tobacco Use ("Tobacco Monitoring") commissioned by the Swiss Federal Office of Public Health. It is a representative, continuous survey of tobacco consumption among 14- to 65-year-olds in Switzerland. Since January 2001, four times a year a new sample of 2 500 persons has been taken (i. e. 10 000 participants annually). The survey was conducted using standardized telephone interviews in German, French and Italian. Results: Approximately half of the working population in Switzerland is exposed to second-hand smoke in the workplace. In restaurants, cafes and bars, nearly 9 out of 10 people are exposed to environmental tobacco smoke. Non-smokers in particular report annoyance with second-hand smoke. Conclusions: The Swiss population has a high level of exposure to second-hand smoke. There is a need for public health educational programs and legislation aiming at banning smoking in public areas and in the workplace

DOI: <https://doi.org/10.1007/s00038-005-4068-4>

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-156702>

Journal Article

Published Version

Originally published at:

Keller, Roger; Prinz-Kaltenborn, Ramona; Krebs, Hans; Hornung, Rainer (2005). Exposure to and annoyance with second-hand smoke in Switzerland: results of the Tobacco Monitoring Survey. *Sozial- und Präventivmedizin*, 50(6):370-377.

DOI: <https://doi.org/10.1007/s00038-005-4068-4>

¹ Department of Psychology, Social and Health Psychology, University of Zurich, Switzerland² Hans Krebs, Kommunikation und Publikumsforschung, Zurich, Switzerland

Exposure to and annoyance with second-hand smoke in Switzerland: results of the Tobacco Monitoring Survey

Submitted: 25 June 2004

Accepted: 2 May 2005

Published Online First: 9 November 2005

Summary

Objectives: To present selected results on exposure to second-hand smoke and experienced annoyance with second-hand smoke in the Swiss population, particularly in restaurants and in the workplace.

Methods: The data were collected as part of the Swiss Survey of Tobacco Use ("Tobacco Monitoring") commissioned by the Swiss Federal Office of Public Health. It is a representative, continuous survey of tobacco consumption among 14- to 65-year-olds in Switzerland. Since January 2001, four times a year a new sample of 2 500 persons has been taken (i. e. 10 000 participants annually). The survey was conducted using standardized telephone interviews in German, French and Italian.

Results: Approximately half of the working population in Switzerland is exposed to second-hand smoke in the workplace. In restaurants, cafes and bars, nearly 9 out of 10 people are exposed to environmental tobacco smoke. Non-smokers in particular report annoyance with second-hand smoke.

Conclusions: The Swiss population has a high level of exposure to second-hand smoke. There is a need for public health educational programs and legislation aiming at banning smoking in public areas and in the workplace.

Keywords: Second-hand smoke – Passive smoking – Exposure to environmental tobacco smoke (ETS) – Involuntary smoking – Monitoring – Switzerland.

While the harmfulness of exposure to tobacco smoke may have been controversial years ago, today we have compelling evidence that not only active smoking, but also passive smoking endangers health. A meta-analysis of 37 published epidemiological studies with a total of 4 626 cases (Hackshaw et al. 1997) showed that breathing others' tobacco smoke is a

cause of lung cancer: For example, a non-smoker living with a spouse who smoked had an excess risk of lung cancer of 24 %. Another meta-analysis of 18 epidemiological studies (He et al. 1999) found that passive smoking is associated with an increased risk of coronary heart disease. While the increase in risk is small, given the high prevalence of passive smoking, it is important. McGhee et al. (2002) demonstrated that exposure to second-hand smoke in the workplace led to 37 % more visits to doctors and thus a drastic increase in health care costs. Also exposure to environmental tobacco smoke (ETS) has numerous negative effects on the health of fetuses and children, e. g. respiratory and middle ear disease, reduced foetal growth, increased risk of stillbirth, sudden infant death syndrome (SIDS), cardiovascular effects and childhood cancer (Klerman 2004; WHO 1999; Wisborg et al. 2001).

In Switzerland sporadic studies exist for the exposure to ETS of specific subpopulations (e. g. Curtin et al. 1998, for women of Geneva). There is however a lack of data for the population as a whole. In view of the harmful effects of environmental tobacco smoke and increased health care costs caused by passive smoking, detailed information on the extent of passive smoking is needed. The present report provides information on how long the Swiss population is exposed to environmental tobacco smoke and how strongly people are annoyed with it, particularly in restaurants and in the workplace. The data was collected as part of the Swiss Survey of Tobacco Use (Tobacco Monitoring).

Methods

The Tobacco Monitoring is a representative, continuous survey of tobacco consumption among 14- to 65-year-olds in Switzerland. It has been developed on behalf of the Swiss Federal Office of Public Health by the Department of Psychology, Social and Health Psychology, University of Zurich

and Hans Krebs, Kommunikation und Publikumsforschung, Zurich. The data collections are conducted by LINK International Research and Consulting, Lucerne.

Instruments

Since January 2001, each quarter a new sample of 2500 persons (survey wave) has been taken, so that annually the survey responses of 10000 participants are available. The survey was conducted using fully standardized telephone interviews in German, French and Italian.

The research instrument consists of a basic module and several special modules. The basic module serves as a means of collecting key data on tobacco consumption (e.g. type and frequency of tobacco consumption, willingness to cease smoking) and on demographics. These questions are asked in every survey wave. The special modules can be added to the basic module for one or more survey waves.

An important aim of the survey is to provide valid data on passive smoking in Switzerland. To gather basic data on exposure to environmental tobacco smoke in 14- to 65-year-olds, a special module containing pertinent items was constructed. Survey respondents were asked these questions in two waves (May to August 2001 and April to June 2002). Apart from the respondents' knowledge of the harmfulness of second-hand smoke that is presented in Krebs, Keller and Hornung (2002), the following information was collected using the passive smoking module:

- Locale of exposure to second-hand smoke;
- Duration of exposure to second-hand smoke;
- Annoyance caused by exposure to second-hand smoke.

Sample

The total sample consists of 14- to 65-year-old permanent residents of Switzerland that have private access to a fixed network telephone and are listed in the Swisscom telephone directory. In the year 2002, about 85 to 90 % of the population were attainable in this way (Spichiger-Carlsson 2002).

The study sample was selected using a two-stage random-random sampling technique (random selection at the household and person levels). In order to have a sufficient number of young persons and young adults as well as pregnant women and mothers of small children for the analysis, we oversampled 14- to 24-year-old men and 14- to 45-year-old women. Residents of the French- and Italian speaking regions of Switzerland are also overrepresented in the sample in order to ensure a sufficiently large sample for each language region in Switzerland. The 2500 telephone interviews, conducted four times per year, are made up of 1425 interviews in the Ger-

man-speaking region, 700 interviews in the French-speaking region and 375 interviews in the Italian-speaking region of Switzerland.

The sample size for the items on passive smoking from both survey waves is 5006 persons. The response rate at household level was 70.6 % and at person level 83.3 %. For an overview of the current study population table 1 provides information on sex, age, language region, education levels, and prevalence of smoking of the survey respondents.

Definition of variables

Exposure to second-hand smoke: The respondents were read aloud a list of places and asked whether and for how long per week they were exposed to second-hand smoke in those places. For example, one item was: "For how many hours per week are you exposed to second-hand smoke in the workplace?"

Smoking status: Whereas the Tobacco Monitoring survey classifies smoking status of the respondents in the four categories of daily smokers, occasional smokers, former smokers and never smokers (have never smoked or smoked fewer than 100 cigarettes in the past), the present report groups people as smokers and non-smokers only.

Education level: Persons at the age of 20 to 65 years, which completed elementary school, are in the group of "lower education level". Those who have completed an apprenticeship are in the group of "middle education level" and finally persons who have a college degree are labelled with "higher education level".

Data analysis

In order to attain representative results, the data were weighted in four steps according to language region, age, gender, and household size distribution in the Swiss population.

The analyses were conducted using SPSS Version 11 for Macintosh. For a complex random plan like ours, special statistics programs (e.g. STATA or SPSS Complex Samples) exist. However, because we use weighted data as mentioned above (oversampling weighting and household transformation weighting) also the classic version of SPSS based on a simple random model computes the test statistics correctly. Differences between groups – depending on data level and distribution of data – were tested using analysis of variance and median tests. For estimating the effect size in analysis of variance, we used *Eta squared*. If the group differences were tested with the median test, the degree of association was assessed by *Eta* (if the independent variable was nominal) or by Somer's D (if the independent variable was ordinal or interval).

Table 1 Study population (N = 5006). Switzerland, 2001–20020

		Men			Women		
		N weighted	N unweighted	Smoking ^(a) (%)	N weighted	N unweighted	Smoking ^(a) (%)
Total 14- to 65-year-olds		2507	2032		2499	2974	
Age (in years)	14–19	257	377	29 %	244	310	23 %
	20–24	210	221	44 %	206	222	35 %
	25–34	526	314	45 %	537	682	30 %
	35–44	593	428	36 %	580	765	31 %
	45–54	501	332	33 %	496	453	30 %
	55–65	420	360	26 %	436	542	20 %
Language region	german-speaking	1834	1133	35 %	1770	1572	28 %
	french-speaking	568	606	38 %	608	935	29 %
	italian-speaking	105	293	37 %	121	467	31 %
Education (20–65 years)	lower	156	140	44 %	303	362	32 %
	middle	1024	738	41 %	1174	1324	29 %
	upper	1031	748	30 %	718	910	27 %

(a) based on weighted sample size

Results

In the following, we report the results on the Swiss population's total weekly exposure to second-hand smoke, exposure to second-hand smoke in restaurants/cafes/bars and in the workplace, and the degree of annoyance with second-hand smoke experienced in those two settings. Supplementary tables with separate results for men and women are available upon request.

Total weekly exposure to second-hand smoke in different locales

Table 2 shows total weekly exposure to second-hand smoke (cumulation of all locales) by sex, age, educational level and smoking status. Exposure occurs mainly in restaurants/cafes/bars (87 %), at event venues (60 %), in the workplace (54 %), but also in schools (29 %), in public transportation (26 %), and in private locations (in the car (20 %), at home (21 %), or at the homes of friends (57 %)).

A total of 32 % (7 %, 9 % and 16 %) of the 14- to 65-year-old population is exposed to environmental tobacco smoke for at least seven hours per week, or on average at least one hour per day. 25 % of all non-smokers inhale tobacco smoke involuntarily for at least seven hours per week, as many as 5 % of non-smokers for as long as 28 hours or more per week. Young people and young adults have the most exposure to second-hand smoke: 50 % of 14- to 19-year-olds are exposed to second-hand smoke for at least seven hours per week. In the 20- to 24-year-old age group, 62 % are exposed to second-hand smoke for seven hours per week, and 15 % for even 28 hours or more per week, that means at least four hours per

day. With increasing age, total exposure to environmental tobacco smoke decreases continuously. Women are somewhat less frequently exposed to second-hand smoke.

Because long exposure to second-hand smoke and subjectively experienced annoyance have been shown to be highest at restaurants/cafes/bars and in the workplace as compared to other locales (Krebs et al. 2002), we examined these settings more closely.

Exposure to second-hand smoke and subjective experience of annoyance in restaurants, cafes and bars

Almost 90 % of the 14- to 65-year-old Swiss population is exposed to second-hand smoke at restaurants, cafes and bars; 30 % of this population is exposed to tobacco smoke for three or more hours per week. Half of all persons exposed to ETS find this second-hand smoke very annoying (26 %) or quite annoying (23 %).

Table 3 shows that men are more often than women exposed to second-hand smoke in restaurants, cafes and bars and smokers more often exposed than non-smokers ($p < 0.001$). Duration of exposure to second-hand smoke also decreases with increasing age. There are statistically significant differences with regard to educational level, but the effects are small.

Women, older persons and persons having higher educational levels find second-hand tobacco smoke more annoying, but the differences are small. As we expected, however, there is a big difference when it comes to smoking status: non-smokers expressed much more annoyance with second-hand smoke than smokers.

Table 2 Total weekly exposure (in hours) to second-hand smoke by sex, age, highest attained level of education and smoking status (N = 5006). Switzerland, 2001–2002

Total weekly exposure (in hours) to secondhand smoke cumulated across all locales (workplace, school, restaurants, event venues, public transportation, private locations)										
		valid	missing ^(a)	28h and more	14– 27.5 h	7–13.5 h	3–6.5 h	1–2.5 h	0 h or < 1 h	
		n	n	(%)	(%)	(%)	(%)	(%)	(%)	χ ² eta (1) Somers' D (2)
Total		4807	199	7	9	16	25	31	12	
Sex	men	2398	109	9	9	18	28	27	9	43.32***
	women	2409	90	5	8	14	23	35	15	
Age (in years)	14–19	476	27	8	16	26	22	23	5	429.473***
	20–24	403	14	15	20	27	24	12	2	
	25–34	1034	28	9	11	29	29	26	6	
	35–44	1123	49	7	7	27	27	33	12	
	45–54	954	42	4	7	28	28	37	13	
	55–65	817	39	3	3	20	20	41	26	
Education (20–65 years)	lower	437	22	7	8	12	19	30	24	9.98**
	middle	2116	82	8	9	15	25	31	12	
	upper	1688	61	5	7	15	30	34	9	
Smoking status	non-smoker	3310	103	5	6	14	26	36	13	228.00***
	smoker	1497	96	12	14	21	23	21	9	

*P < .05, **p < .01, ***p < .001

(a) missing = "I don't know" or "no answer" for at least one locale

Exposure to second-hand smoke and subjective experience of annoyance in the workplace

Approximately half of the working non-smokers and smokers are exposed to second-hand smoke in the workplace (including during breaks). Two-thirds of them find the exposure to the smoke annoying (23 % very, 16 % quite and 27 % somewhat). One out of five fulltime or part-time employees is exposed to second-hand smoke for at least three hours per day; one out of 10 for as long as more than six hours per day.

Table 4 shows exposure to second-hand smoke in the workplace and subjective annoyance with second-hand smoke in the workplace by sex, age group, educational level and smoking status.

The workplace shows a picture similar to that found for restaurants, cafes and bars. Women are somewhat less often exposed to second-hand smoke in the workplace than men, and the number of hours of exposure decreases with increasing age. Persons with higher educational levels are exposed less frequently to second-hand tobacco smoke. The biggest difference is again found for smokers and non-smokers.

In general, the degree of annoyance with environmental tobacco smoke is higher for women and for people having higher educational levels. No differences between age groups were found. As expected, non-smokers report greater annoyance with breathing others' tobacco smoke than smokers do.

Discussion

In Switzerland there is a lack of data on prevalence of exposure to ETS. In view of the harmful effects of environmental tobacco smoke and increased health care costs caused by passive smoking, detailed information on the extent of passive smoking is needed. The present survey provides this information. With regard to the representativeness of the study, the following restrictions need to be considered: The sample contains only German-, French- or Italian-speaking persons. Furthermore, residents are only interviewed, if they have private access to a fixed network telephone and are listed in the Swisscom telephone directory (85 to 90 % of the Swiss population). And finally no statement is possible on the exposure to and annoyance with ETS of children or older people.

The present study shows that the 14- to 65-year-old population in Switzerland has a high exposure to second-hand smoke; 32 % of this population report that they are exposed to second-hand smoke for at least one hour every day. 25 % of non-smokers report breathing in others' tobacco smoke involuntarily for at least one hour every day. These findings agree with the results of the 2002 Swiss Health Survey conducted by the Swiss Federal Statistical Office (Bundesamt für Statistik 2003).

Exposure to second-hand smoke in restaurants, cafes and bars is the longest for young people and young adults. This is probably connected with this age group's habits when going

Table 3 Exposure to second-hand smoke and experienced annoyance with second-hand smoke in restaurants, cafes and bars by sex, age, education and smoking status (N = 5006). Switzerland, 2001–2002

Restaurants, Cafes und Bars													
Exposure to secondhand smoke (hours/week) (n = 4961, missings = 45)										Annoyance with secondhand smoke (n = 4362a)			
		n	> 6h (%)	3–6 h (%)	1–2,5 h (%)	< 1 h (%)	no exp. (%)	χ ²	eta (1) Somers' D (2)	M (1–4)	SD	F	eta squared
Total		4961	8	22	30	27	13						
Sex	men	2483	11	26	30	23	10	104.79***	0.126 (1)	2.43	1.12	25.47***	0,006
	women	2478	5	18	30	31	16			2.60	1.18		
Age (in years)	14–19	493	11	24	27	26	12	265.12***	–0.180 (2)	2.35	1.03	4.01**	0,005
	20–24	413	19	35	28	13	5			2.38	1.06		
	25–34	1056	11	27	32	22	8			2.49	1.13		
	35–44	1160	6	20	30	32	12			2.59	1.15		
	45–54	990	5	20	31	30	14			2.55	1.13		
	55–65	849	4	14	29	32	21			2.55	1.15		
Education	lower	459	7	16	22	32	23	36.37***	0.091 (2)	2.39	1.14	20.22***	0,010
(20–65 years)	middle	2198	9	21	31	27	12			2.44	1.13		
	upper	1749	7	24	33	27	9			2.67	1.12		
Smoking status	non-smoker	3394	6	20	31	29	14	61.95***	0.135 (1)	2.81	1.06	781.04***	0,152
	smoker	1567	13	25	28	22	12			1.87	0.98		

*p < .05, **p < .01, ***p < .001

M = Mean (1 'not at all'; 4 'very annoying'); SD = Standard Deviation; F = ANOVA F ratio

a = only persons with exposure to ETS in restaurants, cafés and bars

Table 4 Exposure to second-hand smoke and experienced annoyance with second-hand smoke in the workplace by sex, age, education and smoking status (N = 5006). Switzerland, 2001–2002

In the Workplace													
Employed persons' exposure to secondhand smoke (hours/week)" (n = 3709a)										Annoyance with secondhand smoke (n = 3709a)			
		n	> 6h (%)	3–6 h (%)	1–2,5 h (%)	< 1 h (%)	no exp. (%)	χ ²	eta (1) Somers' D (2)	M (1–4)	SD	F	eta squared
Total		3709	10	10	17	17	46						
Sex	men	2086	11	11	18	18	42	19.566***	0.030 (1)	1.99	1.12	4.65*	0,002
	women	1623	10	8	15	16	51			2.10	1.14		
Age (in years)	14–19	203	12	13	19	12	44	88.753***	–0.120 (2)	1.84	0.96	2.02	0,005
	20–24	304	15	14	13	18	40			1.90	1.03		
	25–34	890	12	12	22	17	37			2.10	1.15		
	35–44	976	11	9	17	17	46			2.08	1.15		
	45–54	832	7	7	15	20	51			2.01	1.14		
	55–65	504	6	7	12	15	60			1.96	1.19		
Education	lower	276	13	11	15	15	46	15.603***	–0.067 (2)	1.94	1.12	2.04	0,002
(20–65 years)	middle	1733	12	10	17	16	45			2.01	1.12		
	upper	1438	7	8	17	19	49			2.10	1.17		
Smoking status	non-smoker	2457	8	9	17	17	49	32.194***	0.093 (1)	2.28	1.16	176.26***	0,081
	smoker	1252	15	11	17	16	41			1.61	0.95		

*p < .05, **p < .01, ***p < .001

M = Mean (1 'not at all'; 4 'very annoying'); SD = Standard Deviation; F = ANOVA F ratio

a = only employed persons

b = only employed persons with exposure to ETS in the workplace

out, as they frequently spend time in settings where people smoke. At the same time, the result is not surprising because it is in the age group of 20 to 24 years that we find most smokers (Krebs et al. 2002). With increasing age, the average number of hours of exposure to second-hand smoke per week

decreases, but the annoyance with smoke felt by restaurant guests does not decrease.

Slightly more than half of all working people in Switzerland (54%) are exposed to other people's tobacco smoke in the workplace. As compared to the findings of the European

Community Respiratory Health Survey (Janson et al. 2001) on passive smoking for 7 882 persons in 16 countries, the percentage in Switzerland is very high. In the European study, the prevalence of exposure to second-hand smoke in the workplace ranges from a low of 2.5 % for Uppsala (Sweden) to a high of 53.8 % for Galdakao (Spain). For the city of Basel (Switzerland, N = 282), the study found a medium-level prevalence of 20.2 %. However, the study is not representative for Switzerland as a whole, and for methodological reasons, only never smokers were surveyed.

In the workplace, women of all ages are exposed to second-hand smoke for fewer hours than men. This may be due to the fact that employed women in Switzerland, as compared to men, more frequently have part-time jobs, which would shorten their exposure to second-hand smoke at work (Capezzali et al. 2004).

The results also show that as they get older, working people in Switzerland are less exposed to second-hand smoke. This finding is in line with other studies that have shown that younger people in particular are highly exposed to environmental tobacco smoke in the workplace (Knutsson & Nilsson 1998; Helasoja et al. 2001; McGhee et al. 2002). Smoking most likely takes place during breaks from work. Since employees of the same age often spend their work breaks together, and the most smokers are found in the 20- to 24-year-old age group, both smokers and non-smokers in this age group are more highly exposed to second-hand smoke.

Finally, the study also reveals that, in general, persons with a higher educational level express the most annoyance with second-hand smoke in restaurants, cafes and bars and in the workplace. One explanation is that we find the lowest prevalence of smokers among people with higher educational levels and non-smokers report greater annoyance. An alternative explanation may be that people with higher educational levels are better informed about the harmful effects of passive smoking. This may lead them to avoid exposure to environmental tobacco smoke, for the results show that they are exposed to second-hand smoke for somewhat fewer hours per week than persons having lower educational levels. This is confirmed by other studies that also found higher exposure to second-hand smoke for persons with

lower educational levels (Curtin et al. 1998; Helasoja et al. 2001; McGhee et al. 2002). A possible third explanation is that with decreasing socio-economic status, working conditions in the different types of workplaces also worsen (e.g. factory or restaurants), which would increase the likelihood of exposure to second-hand smoke (Whitlock et al. 1998). Supportive of this interpretation is the fact that younger persons having lower educational levels and low incomes are particularly exposed to second-hand smoke (McGhee et al. 2002; Helasoja et al. 2001).

Conclusions

The Swiss population suffers high levels of exposure to second-hand smoke, in particular younger people. It has been confirmed that exposure to second-hand smoke causes health problems and leads to increased health care costs (McGhee et al. 2002). Prevention measures targeting the population at the communications and structural levels are needed, especially with regard to restaurants and the workplace. Although the Swiss population is generally well informed about the harmful effects of passive smoking (Krebs et al. 2002), stronger advocacy is needed in order to stabilize the public's knowledge of the harmfulness of ETS on the one side. On the other side, legislative measures are required for the protection of non-smokers from exposure to second-hand smoke (such as smoking bans in the workplace). Up until now no legislative measures for the country as a whole have been taken. Switzerland is composed of 26 cantons and half-cantons. Sporadically, cantons formulated standards to protect non-smokers against second-hand smoke in restaurants, but these standards are not mandatory. At least in the workplace an ordinance exists: the employer must – in the context of the operational possibilities – protect non-smokers from the smoke of other people.

Acknowledgement

The Swiss Survey of Tobacco Use (Tobacco Monitoring) is supported by the Swiss Federal Office of Public Health (contract No. 02.001670).

Zusammenfassung

Passivrauch-Exposition und subjektiv empfundene Belästigung durch Tabakrauch in der Schweiz: Resultate der Schweizerischen Umfrage zum Tabakkonsum (Tabakmonitoring)

Fragestellung: Im vorliegenden Artikel finden sich ausgewählte Ergebnisse zur Passivrauchexposition der Schweizer Bevölkerung sowie zur dadurch hervorgerufenen, subjektiv empfundenen Belästigung. Insbesondere wird auf das Passivrauchen in Gaststätten und am Arbeitsplatz eingegangen.

Methoden: Die Daten wurden im Rahmen der Schweizerischen Umfrage zum Tabakkonsum (Tabakmonitoring) erhoben. Mit dem Tabakmonitoring wird der Tabakkonsum der 14- bis 65-jährigen Wohnbevölkerung der Schweiz repräsentativ und kontinuierlich erfasst. Seit Januar 2001 wird in jedem Quartal ein neues Sample mit 2 500 Personen gezogen, so dass pro Jahr die Antworten von insgesamt 10 000 Befragten zur Verfügung stehen. Die Befragung erfolgt mittels vollstandardisierter Telefoninterviews in deutscher, französischer und italienischer Sprache.

Ergebnisse: Rund die Hälfte der Erwerbstätigen in der Schweiz ist am Arbeitsort dem Passivrauch ausgesetzt. In Restaurants, Cafés und Bars sind es fast neun von 10 Personen, die dem Tabakrauch anderer ausgesetzt sind. Vor allem die tabakrauch-exponierten Nichtraucherinnen und Nichtraucher fühlen sich dadurch stark belästigt.

Schlussfolgerungen: Die Schweizer Bevölkerung hat eine hohe Passivrauchexposition. Einerseits sollte das Wissen über die Schädlichkeit des Passivrauchens verstärkt der Öffentlichkeit vermittelt werden. Andererseits braucht es gesetzliche Massnahmen zum Schutz der Nichtraucher, insbesondere in Gaststätten und am Arbeitsplatz.

Résumé

Exposition à la fumée passive et impression subjective de gêne provoquée par le tabagisme passif en Suisse: Résultats de l'enquête suisse sur le tabagisme ("Monitorig Tabac")

Objectifs: Présenter une partie des résultats concernant l'exposition de la population suisse au tabagisme passif et l'incommodation ressentie, ce spécialement dans les lieux publics et sur le lieu de travail.

Méthodes: Les données sur le tabagisme passif sont issues du "Monitorig Tabac". Elles permettent de recenser de manière permanente et représentative la consommation de tabac chez les personnes âgées de 14 à 65 ans domiciliées en Suisse. Depuis janvier 2001, un échantillon de 2 500 personnes est tiré trimestriellement (soit 10 000 personnes par an). Le sondage est effectué au moyen d'entretiens téléphoniques entièrement standardisés en français, allemand et italien.

Résultats: Environ la moitié de la population active en Suisse est exposée au tabagisme passif. Dans les restaurants, les cafés et les bars, près de neuf personnes sur 10 subissent le tabagisme des fumeurs. Ce sont en particulier les personnes non-fumeuses qui se sentent fortement dérangées par le tabagisme passif.

Conclusions: La population suisse est largement exposée au tabagisme passif. L'information concernant les effets du tabagisme passif devrait être renforcée. Des bases légales permettant une protection des non-fumeurs, en particulier dans les espaces publics et sur le lieu de travail, devraient être créées.

References

- Bundesamt für Statistik (2003). Schweizerische Gesundheitsbefragung 2002 – Erste Ergebnisse. Neuchâtel: Bundesamt für Statistik.
- Capezzali E, Farine A, Moresi E, Murier Th, Portmann N, Vuille A (2004). Arbeitsmarktindikatoren 2004. Neuchâtel: Bundesamt für Statistik.
- Curtin F, Morabia A, Bernstein M (1998). Life-time Exposure to Environmental Tobacco Smoke among Urban Women: Differences by Socioeconomic Class. *Am J Epidemiol* 148: 1040–7.
- Hackshaw AK, Law MR, Wald NJ (1997). The accumulated evidence on lung cancer and environmental tobacco smoke. *BMJ* 315: 980–8.
- He J, Vupputuri S, Allen K, et al. (1999). Passive smoking and the risk of coronary heart disease – a meta-analysis of epidemiologic studies. *N Engl J Med* 340: 920–6.
- Helasoja V, Prättälä R, Klumbiene J, et al. (2001). Smoking and passive smoking in Estonia, Lithuania and Finland. *The European Journal of Public Health* 11 (2): 206–10.
- Janson C, Chinn S, Jarvis D, et al. (2001). Effect of passive smoking on respiratory symptoms, bronchial responsiveness, lung function, and total serum IgE in the European Community Respiratory Health Survey: a cross-sectional study. *The Lancet* 358: 2103–9.
- Klerman LV (2004). Protecting children: Reducing their environmental tobacco smoke exposure. *Nicotine-and-Tobacco-Research* 6 (Suppl2): 239–52.
- Knutsson A, Nilsson T (1998). Tobacco use and exposure to environmental tobacco smoke in relation to certain work characteristics. *Scand J Soc Med* 26 (3): 183–9.
- Krebs H, Keller R, Hornung, R (2002). Tabakmonitoring – Implementierung eines Forschungs- und Dokumentationssystems. Bericht über das Passivrauchen in der Schweizer Bevölkerung im Auftrag des Bundesamtes für Gesundheit (BAG). Zürich: Psychologisches Institut der Universität Zürich, Sozialpsychologie II.
- McGhee SM, Hedley AJ, Ho LM (2002). Passive smoking and its impact on employers and employees in Hong Kong. *Occup Environ Med* 59 (12): 842–6.
- Spichiger-Carlsson P (2002). Handies: Repräsentativität von Umfragen gewährleistet. Newsletter Schweizerische Gesellschaft für praktische Sozialforschung (GfS) 1: 2.
- Whitlock G, MacMahon S, Vander Hoorn S et al. (1998). Association of environmental tobacco smoke exposure with socioeconomic status in a population of 7725 New Zealanders. *Tob Control* 7: 276–80.
- WHO (1999). International Consultation on Environmental Tobacco Smoke and Child Health. Consultation Report. (WHO/NCD/TFI/99.10). Geneva: World Health Organization.
- Wisborg K, Kesmodel U, Henriksen, TB, Olsen SF, Secher NJ (2001). Exposure to Tobacco Smoke in Utero and the Risk of Stillbirth and Death in the First Year of Life. *Am J Epidemiol* 154: 322–8.

Address for correspondence

Roger Keller
Department of Psychology, Social and Health Psychology
University of Zurich
Rämistrasse 66
CH-8001 Zurich
Switzerland
Tel.: +41 44 634 22 85
Fax: +41 44 634 49 32
e-mail: rogerkel@sozpsy.unizh.ch